

THE
AMERICAN PRACTITIONER:

A MONTHLY JOURNAL OF
MEDICINE AND SURGERY.

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MEDICINE AND SURGERY.


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THE AMERICAN PRACTITIONER.

AUGUST, 1872.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than anything else.—RUSKIN.

Original Communications.

REMARKS ON LEUCORRHŒA.

BY D. M. CLAY, M. D.

Leucorrhœa in its mildest form is a hypersecretion of the mucous membrane lining the vagina and uterus, or of the glandular structure found in these situations, caused by some slight local irritation or physiological change. This slight deviation from normal condition could scarcely be regarded as pathological, in the strictest acceptance of the term, since we find that it almost invariably both precedes and succeeds the menstrual flow. The duration, intensity, and increase in the leucorrhœal discharge, with the accompanying structural lesions, unite to form a pathological condition which sooner or later will produce various derangements of the constitution. It is astonishing with what rapidity this local trouble, however trivial in appearance and anatomical lesions, will manifest itself in complex forms and in various organs. The bare fact of this disease being so common, and the immediate symptoms of such trivial import and vagueness, has led

physicians to overlook or altogether neglect the important structural changes going on in the uterus until the auspicious moment for cure has passed, and the woman is left to suffer perhaps for life. The progress of the affection is slow and insidious, the physician rarely ever being called to treat an acute attack. The origin of the discharge in leucorrhœa has given rise to considerable speculation; but at the present day all are pretty well agreed that in the great majority of cases it proceeds directly from the uterus. The portion of the uterus most frequently involved is the cervical, including the *glandule nabothi*, and the disease is *endo-cervicitis*; but it is not at all uncommon to find the entire mucous membrane of the cavity affected, constituting *endo-metritis*. No doubt during the menstrual epoch the entire mucous membrane lining the vagina and uterine cavity is considerably congested; but this congestion subsides in a few days, and the parts resume their healthy condition. There can be but little doubt in most cases of leucorrhœa that the starting-point of the disease is local irritation and hyperæmia, produced by some slight derangement of the menstrual function, which results in an inability of the parts to revert to their normal condition. This abnormal condition of the secretory functions of the mucous membrane lining the genitalia of the female has been observed by every practitioner who is accustomed to making examinations with the speculum. The *os tinæ* will be found plugged with a glairy, tenacious mucus, while the exterior of the cervix, as well as the vagina, will be dotted over with curdled masses, probably the product of some chemical change in the uterine secretion. While this condition continues it would scarcely be proper to regard it as pathological, since nearly all married women thus suffer without much detriment to their general health; in other words, it would only amount to an exaggeration of a function. But unfortunately there are many cases where this exaggeration of function increases until disorganization of the tissues

ensues, when vast quantities of mucus and glandular secretions, mixed with pus-cells, escape daily. Then it is that we observe the development of those intricate and exquisite sympathies in organs remote from the prime cause.

The constitutional causes are so varied (as regards the general health of individuals suffering from this affection) that it would be almost impossible to define any condition that would be likely either to suffer or to escape from it. Certain it is that climate exercises a considerable influence in the production of this disease, it being more frequent in warm and damp localities than in colder and dryer latitudes. Plethora and anæmia, in a comprehensive sense, are said to be prolific causes, and no doubt are; but when we come to study the local phenomena it has often occurred to me that local plethora was almost if not quite universal even in cases that presented evidences of marked general anæmia. To corroborate this statement, it is a well-known fact in pathology that anæmia, with its resulting debility, is highly conducive to local congestions and intercurrent diseases. Particularly is this observed in organs with highly-endowed vitality and active functions. Rapid child-bearing and abortions are frequent causes, especially with women suffering from anæmia; and frequently after the parturient state is over and the child weaned, when the time arrives for menstruation, leucorrhœa occurs in place of the periodic hemorrhage. **Any** condition of the general constitution or habits of the individual having a tendency to produce local congestions will be a fruitful cause of leucorrhœa.

The local causes are numerous, and by far the most frequent of these, in my opinion, is the want of a proper involution of the uterus after parturition, leaving that organ in a condition of passive congestion, or in an adynamic form of inflammation, constituting what systematic authors are pleased to term corporeal and cervical metritis. When the organ is thus left engorged with blood, and the tissues fail to revert

to their normal condition, displacements in some degree are almost sure to occur, adding another and more formidable cause for the discharge. Frequently when this is the case we observe a granular condition of the os, while the canal of the cervix will present a fungous appearance, bleeding on the slightest touch with the uterine sound. Such cases not only suffer from a profuse leucorrhœal discharge, but are liable at any time to protracted and exhaustive hemorrhages. I have frequently seen patients who had been so much exhausted by the discharge that syncope would ensue at every attempt to assume the erect posture. Reflex action of the nervous system, produced by fissures of the anus, hemorrhoids, eczema, etc., is a frequent cause of leucorrhœa. Whatever may be the cause of the discharge, it is of the utmost importance to ascertain its source as well as its character, and to know, if possible, whether it be malignant or benign, for these are the essential points upon which depend a successful treatment.

Treatment. For any treatment to be successful we must bear in mind that it, like the etiology, is divided into constitutional and local, and a strict adherence to either side will lead to failure. It is quite obvious that we would be unable to arrest a leucorrhœa in a chlorotic subject unless we had recourse to restoratives in connection with a rigid adherence to rules of hygiene; and, *vice versa*, fungosities of the cervix and the uterine walls would not be likely to yield except to direct medication. The secret of success no doubt lies in the judicious combination of the two plans of medication, since we rarely ever meet with a case where tonics or purgatives, as well as caustics and astringents, will not come into requisition. The first and probably the most frequent constitutional departure from health that we will be called on to correct will be anæmia and general debility. To combat successfully this constitutional condition tonics will be admissible, and the ferruginous preparations are preferable; the one we usually employ is the pulv. ferri, combined with quinia and

nux vomica. Some of the preparations of bark, combined with the mineral acids, will be found an excellent tonic.

While administering medicine for the relief of a general symptom, much may be accomplished, and the cure greatly facilitated, by examining into the condition of the various organs the derangement of which would prolong the discharge. The functions of digestion, so liable to become deranged and continue so, in the very incipency of numerous constitutional troubles, should be carefully watched. The blandest and at the same time the most concentrated nourishment, if found to agree with the patient, should be allowed to the extent commensurate with the digestive powers. The bowels should be regulated by such remedies as will produce the least disturbance of the system, and we know of no agent for this purpose that surpasses the preparations of rhubarb and senna. Occasionally, if the bowels are very torpid, a small amount of jalap or colocynth may be added. As a general thing, I am persuaded that the mercurials and the salines are objectionable, though there are cases where the latter remedies act well. All drains from the system, such as lactation and excessive perspiration, etc., should be carefully regulated. The hygienic condition of the patient should be rendered as favorable as possible. She should be removed from a damp locality to one which is dry; exercise in the open air should be encouraged; and a short residence at the sea-shore very often has a salutary effect. Plethora, whether general or local, should be relieved by depletion, either directly or indirectly, by such means as cathartics, scarification, cupping, and leeching.

We now proceed to speak of the local treatment of leucorrhœa; and when one pursues the systematic works on this subject he is struck with astonishment at the diversity of opinion and the multiplicity of the remedial agents employed. Nor is this all. What is applauded by one is quickly and positively condemned by another; and the question natu-

rally arises, Is this diversity the result of a patient and candid trial of the remedies, or is it a want of confidence and experience, or a misapplication of the agents? In some instances there is no doubt that remedies purporting to accomplish certain objects have been too hastily put before the profession. Such, of course, will have but a short run; yet, notwithstanding their ephemeral existence, it has a bad effect by rendering the profession over-skeptical in regard to the properties of many valuable drugs. The first and most important adjunct in the treatment of almost all diseases peculiar to the female generative organs is a good, easily-working, self-retaining speculum; one that will not frighten, give pain, or otherwise become repulsive to the patient. Nott's speculum possesses these requisites to the fullest extent and in the most admirable manner, leaving scarcely anything to be desired. The instrument at once enables us to treat cases intelligently, and to ascertain to a certainty the origin of the discharge. If the discharge be vaginal, we would suggest the following plan of treatment as the one which in our hands has yielded the most satisfactory results. The remedy we are in the habit of employing, and which we regard as *par excellence* the best, is the vaginal douche, thrown in a full, bold, and uninterrupted stream, directed either toward the cervix or vaginal walls. This should be done at least twice a day, and oftener if absolutely necessary. The best syringe I have seen for this purpose is the "Fountain" (the one recommended by Scanzoni), but one similar in construction would answer equally as well; or, in the absence of either of the above-mentioned syringes, a Davidson's will be efficient. The next consideration is the quantity of fluid (water) to be used in ordinary cases, because on this in a great measure depends the salutary effects of the remedy; and in no case where it is not positively contra-indicated would we suggest less than one gallon, and this quantity may be increased with perfect impunity, and it frequently affords the greatest comfort and

relief. I have frequently observed ladies, after spending a night of the most agonizing pain, drop off into a quiet and refreshing slumber during the process of irrigating the vagina and cervix. Again I am persuaded that much depends upon the temperature of the water; and, so far as my experience extends, I would infinitely prefer the warm to the cold, in consequence of there being no shock or reaction afterward, two very important considerations in the treatment of uterine disease. After each irrigation is finished the parts are in a condition to receive medication, either in the form of ointment, solution or solid. I generally prefer the solution, holding some of the preparations of iron, for instance ferri iodidi, ℞j; aqua pura, ℥viij; or ferri sulph. in same proportions. Argent nitrat., cupri sulph., potass. iodidi, potass. chloratis, and the vegetable astringents, are all excellent remedies for this purpose. Whatever medicine is selected, either in solution or ointment, should be applied in such a manner as to reach every portion of the mucous membrane irritated or inflamed. To accomplish this in a satisfactory way with a solution we have been in the habit of advising our patients to add it to the last portion of water to be injected, and then move the nozzle of the syringe backward and forward slowly, at the same time allowing the movement of the fluid to be very slow. Some practitioners prefer incorporating their medicines with cocoa-butter, and mold them into suppositories. This is a good plan; but the majority of patients will object to it on account of the oil or grease. When the disease is situated in the canal of the cervix, whether it depends upon a granular condition of the mucous membrane or simply upon hypersecretion of the glands found in this locality, it will be necessary to use the speculum before the proper application of remedies can be made. After the cervix has been thoroughly exposed there will frequently be observed a thick, glairy, tenacious mucus plugging the os, which will require for its removal some effort on the part of the operator. This is best accom-

plished by using small pieces of cotton attached either to a sponge-holder or a long, delicate pair of forceps. When this mucus has been thoroughly removed, if there be much disease, and that of long standing, the anterior and posterior lips of the os will be found somewhat swollen, resembling to some extent the first stages of œdema; and immediately within the os a rough, red, and fungoid appearance of the membrane will be observed, bleeding on the slightest touch of the uterine sound. The parts are now in a condition for the remedies to be applied; and by fastening a tenaculum to either the anterior or posterior lip of the os, so as to steady the uterus and straighten the canal, any desired agent can be applied from the os externum to the os internum, and even to the fundus itself. The remedy we have been in the habit of employing, and the one we attach more importance to than any other, is chromic acid dissolved in water, one part of the former to two of the latter. The manner in which we have employed this acid is by means of a small piece of cotton, first thoroughly wet with water, which is pressed out, and then spread and securely wrapped around a uterine sound or a long probe. After this is done saturate the cotton while on the probe or sound with the chromic-acid solution, and introduce it gently into the cervical canal fully one and a quarter inches, allowing it to remain only a few seconds. This application should not be repeated oftener than every six or eight days, and not then unless positively indicated. After the application of the chromic acid a piece of cotton of sufficient size to fill the uterine portion of the vagina, first thoroughly saturated with water, afterward pressed out, and then saturated with pure glycerine, should be introduced and packed around the cervix, allowing it to remain from twelve to fourteen hours, and then removed, when the parts should be thoroughly syringed with warm water. This should be done at night, when all treatment must be suspended until next morning, when the syringe and glycerine must be used

again, and if persisted in for ten or twelve days will in all probability result in a cure. It would be well to combine with the water intended to be used for an injection some of the astringents suggested for vaginal leucorrhœa. By this means the cure will doubtless be facilitated. Nor should it be forgotten to inform patients of the peculiar behavior of glycerine when placed in the vagina, that it produces a secretion so considerable in quantity as to excite grave apprehensions (in their minds) that they have suddenly become the subjects of incontinence of urine. Different agents can be used in the same manner as chromic acid, and even at the present time the acid nitrate of mercury is held in high favor by some of the most eminent authorities. Nitric acid, liq. ferri perchloridi, zinci chloridum, and argent nitrat. are all excellent remedies to accomplish the same result.

In nearly all cases of leucorrhœa springing from the sources heretofore mentioned the above treatment will be found successful if persisted in for a few weeks. But occasionally a case will present itself where the discharge will be more persistent, when, if a sponge or sea-tangle tent is introduced into the cervix and allowed to remain for twelve or fourteen hours, and, after its removal, for one day, the parts touched with the caustics, and the glycerine used as before recommended, a change for the better will in all probability occur. This treatment need not confine the patient to her bed, or even restrict her to indoor exercise, except when the tents are used; but, on the contrary, she should be encouraged to outdoor exercise, taking care not to carry it to fatigue.

When the discharge proceeds from the cavity of the uterus, either from the body or fundus, we have found the acid nitrate of mercury invaluable for its relief, but great care should be taken to see that the os and cervix are well dilated before recourse is had to this remedy. The plan we usually adopt is to saturate a small pledget of lint or cotton with the acid nitrate of mercury, and fasten a delicate string around it (the

cotton)—so as to enable us to withdraw it—and gently introduce it to the fundus, allow it to remain for six or eight hours, and then remove it. Repeat this once or twice weekly for two or three weeks, and the result will be most satisfactory. We have had but little experience with intrauterine injections, and that little has not impressed us favorably.

In this article we have made no pretensions to originality, as all, or nearly all, of the remedies we have suggested may be found in the systematic works on gynecology. The methods of applying them to the best advantage is simply the result of daily experience.

A YEAR OF EXPERIMENT IN ELECTRO-THERAPEUTICS:

INCLUDING THE FIRST ANNUAL REPORT OF THE ELECTRO-THERAPEUTICAL DEPARTMENT OF
DEMILT DISPENSARY.

BY GEORGE M. BEARD, M. D., AND ALPHONSO D. ROCKWELL, M. D.,
Electro-theraputists to Demilt Dispensary, New York.

READ BEFORE THE NEW YORK ACADEMY OF MEDICINE, MAY 16, 1872.

About the close of the year 1870 we suggested to the trustees of the Demilt Dispensary the propriety of establishing an electro-therapeutical department in connection with that institution. Shortly after, by the unanimously-expressed wish of the medical staff of the Dispensary, the trustees decided to establish such a department; and with a liberality that can not be too highly commended, and with an enthusiasm for science that is exceedingly rare among businessmen, they set aside a room and supplied it with all needful apparatus for electro-therapeutics.

One object in establishing the department was to afford opportunity for experiment. It was our desire not only to treat cases for which electricity had been proved to be beneficial by past experience, but all diseases from any of the departments that were sent in, paying no regard whatever to any merely theoretical reasoning on the subject. False theories have all along retarded the science of Electro-therapeutics, just as they have retarded all other branches of science and the general progress of the human race. At the present day the best results of electrical treatment are seen in just those diseases where, by *a priori* reasoning, it was supposed to be contra-indicated.

We started out with the idea that the results, whether favorable or the reverse, would be of service to science. If it be important to know where electricity is needed, it is also important to know where it will do harm. Now the true and only way to exhaust the indications for the use of electricity is to treat all cases just as they come by all the different methods, and note the results, whether good or bad. The opposite method of selecting those cases that promise well to our very imperfect vision may be the wise course for the practitioner, but science will never be advanced by any such method, and ultimately both patients and physicians are losers by it.

HYSTERIA AND ALLIED AFFECTIONS.

Among the affections allied to hysteria is neurasthenia, a term which we have devised and applied to what is called nervous exhaustion—a condition where exhaustion is the leading feature—uncomplicated with any special organic lesion. One case of neurasthenia, with a full pulse of 115, was greatly improved by general faradization. A case of hysterical mania in a woman aged fifty-five, with symptoms of anæmia—constipation and delusions of various kinds, such as fear of the police, etc., all of six months' standing—was so much bene-

fited by general faradization alone that after the tenth application she seemed to be entirely restored; but she soon relapsed, and treatment by general faradization was again employed. Under this she made progress, but slowly. Galvanization of the brain and sympathetic, however, brought her up to pretty nearly the standard of health.

Another case, a woman aged forty-five, who had been debilitated by a two years' siege of intermittent fever, and who presented the symptoms of globus hystericus, hysterical paralysis of the right arm, and melancholia, was so much benefited by twenty-five applications of general faradization that she was able to return to her duties as servant-girl. The melancholy was cured, and also the hysterical paralysis of the arm. Her pains were relieved, the bowels regulated, and the appetite increased by the tonic effects of the treatment.

A case of chlorosis in a girl of eighteen, with the symptoms of yellowness of the skin, irregularity of menses, and general debility, was greatly benefited by general faradization. Two other cases of hysteria, with the symptoms of globus hystericus—nervous trembling, fits of crying, flashes of light before the eyes, and nervous twitchings of the muscles—were rapidly improved by general faradization.

It is a noteworthy fact that while neurasthenia, neuralgia, chlorosis, and many other affections allied to hysteria, are more frequent among the higher orders, hysteria itself is quite as common among the ignorant or servant-girl class, in whom the emotional nature reigns pretty nearly supreme, unchecked by reason or education or common-sense.

In private practice we have treated for a long time cases of hypochondriasis, melancholia, and insanity of various kinds by central galvanization, or by simple galvanization of the brain and cervical sympathetic, and sometimes by general faradization, with results that warrant us to persevere.

Dr. Bryce, Superintendent of the Alabama Asylum, consulted us about electrical apparatus a year and a half ago,

and he has since written that he meets with good results in certain forms of insanity from both currents. In England and in Germany the electro-therapeutics of insanity is now undergoing investigation.

NEURALGIA.

Of neuralgia, uncomplicated, but two cases were treated. A case of sciatica was apparently cured by three local galvanizations. A case of neuralgia of syphilitic origin was but slightly benefited by local galvanization, was made worse by central galvanization, and somewhat improved under general faradization.

We remark here that the statement made by some European writers of ability, that the faradic current is useless in neuralgia, is contradicted by the experience of scores of physicians in this country, who are every day relieving or curing cases of true neuralgia of a central origin by faradization alone.

RHEUMATISM.

Of rheumatism six cases were treated. Of these five were greatly relieved by the treatment; and one case of very long standing, in which the joints of the lower limbs were involved, was treated for several months by general faradization and central galvanization with only slight benefit. In some cases relief of pain followed a single application.

Of the various methods of application employed for rheumatism, general faradization seemed to accomplish more than localized galvanization of the joints, and very much more than central galvanization. This would show so far forth that rheumatism is not so directly under the influence of the central nervous system as some other diseases. Rheumatism is, however, a constitutional disease, whatever its pathology may be, and merely local electrization of the affected joints is not satisfactory. It may relieve that particular part, but it does very little toward eradicating the disease.

General faradization favorably affects rheumatism in several ways: 1. By its stimulating tonic influence over the whole system; 2. By the relief of the local manifestations; 3. By modification of the urinary secretion.

Rheumatism is benefited by tonics of various kinds, as quinine, iron, etc., and general faradization acts as a tonic. By the special influence that it exerts on the liver and all the organs of digestion it greatly assists the cure of the forms of rheumatism that are at all curable.

We have seen cases where the secretion of urine was greatly increased after a single application of general faradization; but the cases where such increase is demonstrable are not very frequent.

Muscular rheumatism is the type that gives way most readily to electrical treatment. Next to that the subacute articular variety offers the best chance of benefit; and last of all come the very chronic forms, where the unfortunate patient is, as it were, tied up in knots from long-standing affection of the joints of the upper and lower limbs. It is not pleasant to treat these latter cases. They appreciate, it is true, the tonic effects of the treatment in a general way, and that is about all. It is possible that localized galvanization, prolonged for hours or days by means of apparatus placed at the bedside, might compel these maladies to give way; but we have never yet brought this idea to the full test of experiment.

The most hopeless forms of rheumatism are those which simulate arthritis nodosa, or rheumatic gout, if indeed they are not actually that disease. It is possible to do but very little for such cases.

PARALYSIS.

Of paralysis of different kinds we treated five cases, four peripheral and one infantile. These cases behaved as cases of paralysis usually do under electrical treatment, and upon

this subject we have little that is new or suggestive to communicate. We simply remark that it is a mistake, and one that is often made, to use too strong currents and too long applications. A current just sufficient to produce muscular contractions is preferable. The earlier this form of paralysis is taken under treatment the better. It is delay frequently that makes it require protracted treatment.

DYSPEPSIA.

Six cases of dyspepsia were treated, five of which recovered and one was improved. The leading symptoms in the above cases were pain after eating, nausea, vomiting, pyrosis, constipation, anorexia, flatulence, and mental depression. The methods of treatment employed were general faradization, galvanization of the sympathetic, and pneumogastric and central galvanization. Very few diseases yield so surely to any remedy as nervous dyspepsia yields to electrization, the exceptions being those cases where from some peculiarity of constitution electricity is not well borne.

BRONCHITIS.

Five cases of bronchitis were treated. Of these one was much improved by five weeks' treatment with central galvanization; another case, complicated with phthisis, was considerably benefited in a general way by persevering treatment; another case was benefited for a time; and the fifth case, complicated with phthisis, was improved. None of the cases were perfectly cured, and those complicated with tubercular disease will doubtless die; and yet the electrical treatment of phthisis is not wholly a failure.

The method we adopted in cases of tubercular deposit in the lungs was to apply a mild galvanic current directly through the diseased region, with a view to cause absorption. In the experience we have had with this method up to date we have had no satisfactory evidence that absorption of any great

amount is caused by such treatment; but through the influence on the sympathetic and spinal cord, directly and indirectly, very much benefit is derived that deceives the patient and perhaps the physician.

ASTHMA.

Of asthma two cases were treated. One of these, a woman of middle life, had for three months suffered from the disease, brought on, as she said, by the smell of cooking. Galvanization of the sympathetic and pneumogastric at once benefited her, and in two weeks she was apparently cured, and we have not since heard from her. This is the best result that we have ever seen in asthma. It may be accounted for by the recentness of the attack; and the query occurs at once whether the majority of cases might not be cured if they were taken early, before the asthmatic habit had become engrafted into the system. The other case, a man aged fifty, had suffered for five years. His distress was very great, and the attempt to walk half a block caused a feeling of suffocation. One seance of five minutes gave him such positive relief that he was able to walk home, a distance of one mile. He did not return for treatment.

Asthma, so far as electrical treatment is concerned, would appear to come in the same category as facial spasm, blepharospasm, and other similar local spasmodic affections, which when recent and mild are very easily cured, but when long-existing and severe are susceptible only of temporary relief.

INTERMITTENT FEVER.

Three cases of intermittent fever were treated. Electricity is prescribed for those subacute or chronic stages of intermittent fever where the patient is able to go about, but is debilitated, and is liable to frequent or even daily attacks; not as a specific at all, for electricity is not a specific for anything, but as a general stimulating tonic.

In one case the patient, who had suffered from chills and fever every day for eleven months, and had become anæmic, was much improved by general faradization, and stopped treatment. Three weeks after the chills returned, when three sances of galvanization of the spine and sympathetic apparently effected a cure. Another case was so much influenced by general faradization that the attacks, which had been daily, came on only every fourth day. The third case abandoned treatment after the first application. These results confirm our previous experience in private practice.

DISEASES OF WOMEN.

In the department of gynecology we have little of interest to record. Of amenorrhœa four cases were treated. Of these one was cured by faradization of the uterus. Another case, where at the usual time for the menses there was headache and much pain, was relieved of these symptoms, but not cured of the amenorrhœa. Another case, a sterile woman who desired children, was not benefited. The fourth case was an Irish girl, whose menses had been stopped by a sea-voyage. After eight sittings of general faradization the courses came on, and lasted five days.

INCREASE IN SIZE OF AN ATROPHIED UTERUS.

In private practice we have demonstrated that an atrophied uterus may be so improved in its nutrition under localized faradization as to increase in size, as shown by careful measurement. The current makes the muscular tissue of the uterus grow just as it makes atrophied muscles grow in paralysis. On the other hand, nutrition of an engorged uterus may be so modified by electrization with either current that it diminishes in size.

SPINAL CONGESTION.

Of spinal congestion seven cases were treated. Before speaking of these cases we may remark, first, that the diag-

nosis of spinal congestion in the mild, passive, and chronic stages is oftentimes very difficult. The symptoms of spinal congestion in the chronic stage are numbness of the extremities, of an arm or a leg, or only the part supplied by a single nerve, as the ulnar; neuralgic pains of a sharp, shooting, or boring character; a feeling of pricking or tingling or burning in the bottoms and along the sides of the feet; soreness on pressure, a feeling of constriction in the trunk or ankle, flatulence, constipation, bladder difficulty, fibrillary contractions and twitchings of muscles, a feeling of pressure on the chest, coldness of the extremities, stiffness of neck, a feeling of weakness on walking, and a disposition to tire out easily in the lower limbs; sensations of localized heat and cold in various parts of the body, insomnia, anorexia, cramps of the muscles, spinal tenderness, and actual paralysis.

Now these suggest a variety of diseases. Many of the symptoms of locomotor ataxy and progressive muscular atrophy in their early stages are found in spinal irritation and cerebral congestion, which, by the way, is oftentimes complicated with spinal congestion; but when all or the great majority of these symptoms appear in any case, and are persistent, and are worse when the patient is in a recumbent position, we make the diagnosis of spinal congestion. When the patient lies down at night the numbness increases and the pains come on, and the morning is the worst part of the day. These symptoms must all be read together, and in their relation to each other, in order to interpret their meaning. Patients suffering from spinal congestion often pass for cases of rheumatism, dyspepsia, general debility, spinal irritation, spinal sclerosis, neuralgia, or hysteria.

Secondly, we remark that congestion of the cord is frequently, if not usually, a result of atony of the cord; and that the simple statement of the fact that the cord is congested does not go far enough in the elucidation of the pathological condition. The congestion is not the disease, but rather the

expression of the disease. The spinal cord is so exhausted that it has not strength to keep off congestion; and in our treatment, whether we use electricity or internal medication, we should aim not so much to directly reduce the amount of blood in the cord as to increase its *tone*, that it may be able itself to throw off its superfluous blood. Electricity then helps spinal congestion not so much by directly reducing the amount of blood in the cord as by improving the nutrition, and enabling it to do its own depletion.

Of the cases that were treated in the dispensary one came twice, and was not benefited; one came three times, and was so much relieved that he came no more; one case, where paralysis of motion existed, was cured after two months' treatment; one case, after four applications, was very much helped; and still another case of an aggravated character was by two months' treatment (seventeen applications) so much benefited that the patient believed herself cured, until one day she walked a long distance, became exhausted, and the old symptoms appeared in full force. A second course of treatment again relieved her.

SPINAL IRRITATION.

Of spinal irritation, pure and simple, only one case was treated, although an irritable condition of the spine was noted as a complication in a number of cases. Among the class of patients who frequent our public institutions spinal irritation is not so common as among the higher orders of society. The pathology of spinal irritation we take to be a general anæmia or neurasthenia, or both combined, in which the spinal cord shares to such an extent that it can not maintain the proper balance of circulation, and may therefore alternate between anæmia and hyperæmia. Here, as in spinal congestion, the great point to be considered is not so much the vascular condition of the cord as the disease of the cord or of the system on which this vascularity depends, and of which

it is a symptom. Alternations of anæmia or hyperæmia (fluctuations in the circulation) are observed continually in persons who are in a susceptible nervous condition. Under excitement the face may redden or turn pale, or it may first manifest a blush and then paleness. The eye in nervous people, the anæmic or neurasthenic, illustrates this feature of unbalanced circulation perhaps better than any other organ. The conjunctiva may suddenly become congested, or as suddenly become pale. A slight emotion, a flash of bright light, a stoop or bend of the body, the least over-use or strain, may bring an excess of blood to the eye that very quickly departs as the cause disappears. Under the ophthalmoscope the retina is seen to flush or pale while the cervical sympathetic is being galvanized or from other irritation.

The hyperæmia which follows the use of a powerful current soon subsides into comparative anæmia. Indeed, the circulation of the retina is so easily affected one way or the other that ophthalmologists have been slow to accept the view that the effects we have referred to were due to the action of the current on the sympathetic.

Some of the symptoms of spinal congestion are also found in spinal irritation, for the reason that in the latter condition the cord may be a part of the time, or by intervals, congested. They differ, however, from the symptoms of fixed congestion in two respects: first, they are not so pronounced or permanent; and second, they are relieved by a recumbent position, and are better in the morning.

Another consideration of importance is that spinal irritation is most frequent in anæmia, and is especially common in women, while spinal congestion is found in both sexes, and attacks all organizations. Spinal congestion is caused by excessive exertion, or by taking cold, as well as by all nerve-exhausting habits. Spinal irritation is not excited by taking cold. Excessive physical exertion may increase it, but it is mainly the result and symptom of inherited or acquired

nervous debility, and disappears in proportion as the debility disappears. Both spinal irritation and congestion are apt to be attended by head symptoms, which differentially follow the same law as the other symptoms of these disorders. The case of spinal irritation at the dispensary had suffered for four months from headache, mainly across the forehead. There was at times a marked fullness of the temporal arteries, which would diminish under mild galvanization. There was difficulty of respiration, a feeling of suffocation, great pain in the back, especially in the lower dorsal and lumbar vertebræ. There was pain in the region of the heart, and examination by auscultation and percussion gave evidence of dilatation. The pulse was intermittent, the appetite poor; but the tenderness of the spine on pressure, so common in such cases, was not in this instance a marked feature. All her symptoms were relieved by lying down, and in the morning she always felt better. Treatment by general faradization at first increased the headache and pain in the back. Central galvanization relieved the pain in the head and back, and with various relapses this improvement continued. We have no reason to believe that the improvement was entirely permanent, for of all symptoms of the nervous diathesis this is perhaps the easiest to relapse. Under electrical treatment, or under counter-irritation to the spine, they yield sometimes very rapidly; but a little over-exertion, the reception of bad news, a few sleepless nights, and away they go back to their old condition.

In two cases of spinal congestion we tried to solve the question whether the ascending or descending current was most successful. Both cases appeared to be injured by the ascending, while both were benefited by the descending, current. Whether the difference of effect was due to the differential action of the poles or the direction of the current we are unable to state. As a rule, we prefer descending currents in central galvanization and in general faradization; but in ordinary localized applications to the periphery or special

organs, as the uterus or bladder, we do not find so much difference as has been claimed in the effects of the ascending or descending current.

LOCOMOTOR ATAXIA.

Of locomotor ataxia (posterior spinal sclerosis) one case was treated, and mainly by galvanization of the spine and central galvanization. The benefit derived from a few applications was slight, and the patient did not return.

In regard to this disease there are two considerations of great importance: 1. That cases of simple spinal congestion or irritation are frequently called locomotor ataxia; 2. That when the process of degeneration of the posterior columns of the cord has actually set in, with the necessary body of symptoms that accompany such degeneration, perfect recovery is very rare under electrical or other treatment. In Europe, and especially in Germany, the so-called functional or milder disorders of the nervous system are much less frequent than with us, and hence physicians there are not prepared for them when they occur, and are apt either to ignore or mistake them. Even in the most recent German works, and in some of the medical journals of that country, we see cases of spinal congestion of a not very severe form mistaken for spinal sclerosis, and gravely reported as cured by hydro-therapeutics or electro-therapeutics, or by nitrate of silver.

Now, in regard to the electrical treatment of locomotor ataxia, our experience is that grateful relief or cure of some of the symptoms and decided general benefit is derived from it. Remissions and improvement that are greatly encouraging to the patient, and perhaps deceive the physician himself, occur; but never a perfect or an approximate cure, except in the early stages. The relief of the pain is very desirable, and this we may accomplish by central galvanization or general faradization; and it may be here remarked that some of the best results of the treatment of locomotor ataxia that we have

seen have been accomplished by general faradization, either alone or alternating with galvanization of the spine.

DISEASES OF THE EYE.

A case of deplopia, resulting from paralysis of the trochlearis muscle according to Dr. Derby, who sent him to the electro-therapeutical department, began at once to improve under localized galvanization, and after twelve seances was cured. How permanent the cure was is not known. A case of congenital paralysis of the motor oculi, where only the power to distinguish light from darkness remained, was so far benefited that he could distinguish such objects as a knife or a watch at a distance of four feet.

ADDISON'S DISEASE.

A woman that presented the bronzed-skin appearance of Addison's disease was treated for one month by general faradization with benefit as regards her general symptoms. In private practice, in a case of undoubted disease of the supra-renal capsules, where the diagnosis was made by Prof. Austin Flint, we have demonstrated that general faradization and galvanization of the sympathetic, although powerless to effect a cure, are followed by results the most gratifying, so far as improvement in the general condition of the patient is concerned.

DISEASES OF THE SKIN.

What has been learned in the electro-therapeutical department of the dispensary in the treatment of diseases of the skin is itself a sufficient reward for all the expense of inaugurating such a department, and for all our professional labors there from the beginning until now. Dr. Woodruff, one of the physicians in charge of the skin class, has shown great interest in our investigations by sending in cases, and thus given us opportunity of testing the various methods of application in a department which now promises to be one of the

most satisfactory of all the special branches of electro-therapeutics. We had previously experimented in the electrical treatment of some of these diseases, in connection with Dr. Piffard, at the dispensary for diseases of the skin, and also in private practice by intervals during the past three or four years.

Eleven cases in all of diseases of the skin were treated in the electro-therapeutical department; six cases of chronic eczema, and one case of each of the following diseases: psoriasis, erysipelas, syphilitic tubercle, favus, and superficial ulcer. All the cases of eczema that persevered (three in number) recovered. The case of psoriasis did not persevere, the case of favus was not benefited, and the ulcer was cured. It was here that we first demonstrated the immediate and sometimes permanent relief of the pain, itching, and burning with which eczema and other diseases of the skin are so often associated.

TUMORS.

Of tumors ten cases were treated, as follows: two cases of scirrhus of the breast, one of epithelioma of the lip, two of uterine fibroid, four of goitre, and one cystic tumor. The goitres were all reduced in size more or less by the use of the needles; but none have yet been entirely cured, although some of them have been treated with great perseverance and by all varieties of applications, by catalyzation—that is, by external applications with sponges, by one needle or by many needles—with and without ether, and by ether spray. Goitres do not rapidly disappear under electrization. In many cases, like fibroids and other tumors, they grow smaller under the treatment up to a certain point, when they hang fire, and will not budge an inch further.

It is, of course, possible to destroy any tumor that is accessible by electrolysis, provided a sufficiently strong current be used, and sufficient time be given to it; but then the question must always arise whether the disease or the remedy is most

to be dreaded. For malignant growths the choice is easy. For benign, painless growths, like small goitres, it is a question whether they are worth the pain and annoyance of an operation of any kind.

THE METHOD OF WORKING UP THE BASE.

The epithelioma of the lower lip was destroyed, root and branch, by a method of electrolyzation that we have recently employed, and which we call *working up the base*. This method consists in inserting the needles around the tumor and partly into the healthy tissue, so as to undermine the former, and cut off all communication between it and the healthy tissue. This method is followed by complete sloughing of the growth, granulations, and healing. The usual and accepted method of electrolyzation is to insert the needles directly into the tumor.

The method of working up the base or undermining the tumor has the advantage that it is more thorough, since it makes sure of the complete destruction of the growth; that it is shorter, since it wastes no time on the body of the tumor, which really is of no consequence if it be separated from the healthy tissues; and that it insures a more satisfactory healing.

We use this method not only in epithelioma, but in malignant growths of all kinds and in all accessible locations, as the vagina, rectum, and breast. One of the cases of cancer of the breast that had been sent to us by Dr. Stephen Rogers was for the time relieved of her pain by external faradization and galvanization, and a portion of the growth was favorably influenced by electrolyzation, but only to a limited extent. The patient was saturated with cancer; and when she died, a few months after abandoning treatment at the dispensary, deposits were found, as Dr. Rogers informs us, in the internal organs. Another case of cancerous nodules following an operation did not pursue the treatment long enough to enable us to test its merits.

In conclusion, we desire to express our obligations to the staff of Demilt Dispensary, and to our assistants, Dr. H. N. Griswold, Dr. R. S. Tracy, Dr. Marsh, and especially to Dr. J. H. Sterling, whose carefulness and fidelity in carrying out the details of many of the experiments here recorded can not be overestimated.

MANAGEMENT OF THE PERINEUM IN LABOR.

BY H. PLUMMER, M. D.

READ BEFORE THE MEDICAL SOCIETY OF MERCER COUNTY, KY.

During the past few years of my professional life the propriety of supporting the perineum in labor is a question that has often occurred to my mind. Well do I remember the impression made upon me, when a student attending medical lectures, in regard to the great necessity of diligent support, especially in primiparæ. We were warned that if we failed to attend strictly to this great matter the result would be, in a large number of cases, laceration of the perineum, and possibly recto-vaginal fistula; and during the first few years of my practice, when called to a woman in labor, my leading thought was to support the perineum. My poor patients often entreated me to desist, but I was impressed with the idea that if I made firm pressure in some of the various modes recommended by learned writers everything would go right. The result of my reading and observation has been a conviction that in all this I was wrong, and that such support is not only ineffectual, but oftentimes injurious.

The practice of supporting the perineum in labor seems to have been first recommended by Puzos in 1747. In his

work, published in 1759, he directs pressure to be applied to the perineum "from behind forward." He deemed such support valuable as obviating the danger of laceration; but he seems afterward to have modified his opinions as to the efficacy of such support, and says that "partial lacerations are inevitable in first labors; complete through the sphincter are about once in a thousand times." In 1767 John Harvie advocated support as a novelty in his "Practical Directions showing a Method of preserving the Perineum at Birth;" though years later Talver showed that this was the practice in Paris; but it was only through the influence of Hamilton in 1775, and of Dease in 1783, that support to the perineum became an established canon in midwifery. After nine years' experience Hamilton so changed his views that he says, in an additional work, "support to the perineum is a doubtful and hazardous expedient."

Through the influence of enthusiastic writers, one of whom subsequently recanted, this error spread so rapidly over the whole civilized world that at the present day "support the perineum" has become the watchword of all the schools of midwifery.

Dr. Goodell, of Philadelphia, in the *American Journal of the Medical Sciences* for January, 1871, thus describes the various methods by which this practice is pursued. "There are those," he says, "who make pressure on the perineum to retard the head, those who make pressure to accelerate its advance, those who deny that any such effects can be thus produced, and those who conscientiously use support because something must be done. Again, there are those who direct all the pressure at the fourchette; others who reprehend this, and as carefully guard the posterior perineum; and yet others who will not touch the perineum on any account. Further, there are those who push the perineum backward, and those who, for equally plausible reasons, push it forward. Some dilate the sphincter vaginae, some the sphincter ani, and some

plug it up. Some place their hands transversely across the perineum; some longitudinally, with the fingers looking upward; some longitudinally, with the fingers looking downward; and some attack it with their knuckles. Some scoop out the head with the vectis, others drag it out by the ears, and yet others rely on the forceps. Finally, there are those who use the right hand and those who swear by the left; some who advocate a folded napkin, some an unfolded napkin; and others again who frown down upon all napkins, folded or unfolded. Again, there are others who nick the sides of the vulva with their finger-nails; some use a lancet instrument for the purpose; some who cut subcutaneously through from one third to one half of the fibers of the constrictor muscle near the clitoris, others who depend upon the forceps or medicines for the purpose of producing relaxation of the soft parts."

Churchill says: "I must altogether object to any attempt to retard the passage of the child as erroneous in theory and mischievous in practice." Velpeau says "the object of support is to compel the head to extend and hug the pubis, and not to hinder its descent." W. Tyler Smith "avoids touching the perineum, and simply retards the head."

I confess that I am not able to see how pressure upon the perineum in any way averts the danger of its laceration, but I can understand how it may favor such an accident. The parts are already on the stretch from the descending head of the fetus when you increase the strain upon them by pressure from without. In this way it seems to me probable many lacerations are brought about. They are not often encountered in girls who, desiring to conceal their shame, give birth to their children alone and unaided. They are said to be unknown among savage mothers. They seldom occur among the laboring classes, who for the most part require and receive but little obstetrical assistance. It may be doubted whether any amount of pressure that can be safely applied against the

head of the child will retard its descent; nor am I convinced that any external pressure facilitates the process of labor, except that it may turn away the head from the perineum when impinging with dangerous force against it, and give the child the proper direction. It is often very disagreeable to the woman, and when so ought certainly not to be urged upon her. The whole process of parturition is one usually so natural that in a vast majority of cases it may well be left to the efforts of nature.

This practice, which for so long a time passed almost unquestioned, is evidently beginning to lose ground. I will not stop to quote the evidence against it, but may cite one or two authorities. Swayne says that he has for eighteen years left the perineum to nature; and his father remarks, after forty years of practice, "I can not say that I have not met with cases of lacerated perineum, but they have been very few, and in none has the sphincter ani been involved." The practice recommended by the majority of writers is that the support should be applied just at the time the head passes over the perineum; but they admit that just at that time the pains are so severe that the woman will throw herself about so as often to jerk away from your hand, and thus the perineum, abruptly relieved from the counter pressure, is much more liable to rupture if there is any value in that support. Denman admits that the greatest degree of laceration that ever occurred to him was occasioned by the patient suddenly withdrawing herself out of his reach. Similar cases are related by Smellie, Lee, and other well-known writers on obstetrics.

For these reasons I should not attempt to support the perineum in the way generally recommended; but if any assistance were necessary I would prefer to rub forward the corrugated scalp in the absence of pain, and to introduce the fingers into the rectum, assist in raising the head, and make it as far as possible hug closely the pubic bones. When the pain subsides you can push back the head. By this means the

pains are lengthened and the time prolonged, so that the parts may become fully dilated. By keeping the fingers in the rectum during the last moments of labor you can follow the movements of the woman, and what assistance you may be able to render her will be regular and uniform, and you can thereby to some extent force the head to describe the curve of Carus.

Doubtless the passage of the shoulders produces laceration as often as that of the head. Some accoucheurs do not wait for nature to do her work, but when the head is delivered proceed to make traction on the head, thus forcing the shoulder against the perineum, and possibly forgetting the curve.

Child-birth being a physiological operation, means are adapted by nature to an end; and the perineum, I am sure, "was not created to be torn unless shoved up by the hand of the physician." "I can not believe," to use again the language of the writer just quoted, "that nature, after making such admirable provision for the earlier stages of labor, bungles matters to such an extent at the end as to render the aid of the obstetrician in every case necessary to remedy the mechanical deficiency."

EL DORADO, KY.

ON CHOLERA INFANTUM.

BY JOHN O'REILLY, M. D.

In the *American Practitioner* for August, 1870, Dr. B. M. Wible, in an article on cholera infantum, has the following remark: "Without attempting to show reasons why mercurials are not useful, experience has taught me that they are not only useless, but often manifestly pernicious." In the

same number of that journal Dr. L. P. Yandell, sr., treating of that disease, says: "Foremost among remedies in cholera infantum I do not hesitate to place calomel."

These extracts from the pens of two eminent practitioners furnish my excuse for adding another communication to the many articles which have been written on cholera infantum. This conflict of opinion is embarrassing to the young practitioner. How are we to account for it? The answer I would give is that the remedy referred to has not been employed under the same circumstances. To get the beneficial effect of a medicine it must be given not only in proper doses, but at proper intervals and in proper conditions of the system. Applied at one stage it may be active and salutary, at another it may prove inert or mischievous; and of no complaint or remedy is this more true than of calomel and the summer-complaint of children.

Cholera infantum arises from external causes, which are manifest enough; but of the internal changes attending it we are not so well informed. The popular name assigned to the disease is evidence of its connection with summer heat. Indigestible food must also be assigned as an exciting cause. Congestion of the stomach and bowels, caused by the natural development of the intestinal tract and its glands preparatory to the digestion of other food than the mother's milk, I take to be the internal cause. In reference to its seat, the disease may properly be regarded as

1. Gastric;
2. Intestinal; and
3. Gastro-intestinal.

And each form demands special medication, more particularly as regards calomel.

Gastric cholera infantum generally comes on in the following manner: the child, apparently well at night, commences to fret and cry in the morning; is restless; has nausea and

vomiting, and sometimes a diarrhea follows in a little while; but in other cases the bowels are not disturbed, and in fact purging is never a prominent symptom in this form of the complaint. The gastric disturbance increases, and the little sufferer may die in forty-eight hours, with all the appearances of cerebro meningitis. The alvine evacuations are large and watery, and, though not so frequent as in another type of the disease, rapidly exhaust the patient.

In that form of the complaint which I term intestinal the evacuations from the bowels are large and watery from the beginning. These may consist of green matter, or a mixture of green mucus and curdled milk. The child often has ten or twelve of these passages in twenty-four hours, and still may be able to walk around. It takes milk freely, and picks at dainty morsels, but has little appetite. Vomiting is not present, or at most is only occasional. The duration of this form of the disease is variable. It may continue a few days before the stomach becomes involved; but when this takes place the child is often carried off rapidly, as from exhaustion. If the symptoms last long spasms are apt to occur, and the patient dies with what physicians formerly called hydrocephalus. The head symptoms in this form differ from those in the foregoing in this, that they are less violent. They result more manifestly from exhaustion, and have less in them of an inflammatory nature. In the former condition a leech to the temples might be beneficial; in the latter a whisky toddy is indicated.

This form of the disease often becomes chronic. I have seen children suffer during the greater part of summer, and yet finally rally and recover on the occurrence of cool weather. The reason is obvious. So long as the stomach is not involved the child's appetite is comparatively good, and it takes nourishment enough to keep it up.

But we have a third form of summer-complaint, the gastro-intestinal, in which stomach and bowels give way at the same

time. The child commences to vomit and purge at the outset, and unless relieved soon dies from exhaustion. The second and third varieties are those which we have most frequently to deal with. The first and the third are the most fatal. We are aided in the treatment of the disease, I think, by this classification; for, according to my experience, a modified plan is required in each form.

The remedies I have to propose are not numerous, nor are they new; but success will depend very much upon the time and mode of their application. The first indication in every case is to remove as far as possible the external causes. Inordinate heat is counteracted to some extent by frequent sponging of the body with cold water, good ventilation, and taking the child out morning and evening. The question of diet is unimportant, since in the early stage of the disease there is no appetite, and all food is improper. In the first and third forms of cholera infantum we give no food at all. It does not certainly seem rational that a stomach secreting no gastric juice, and which will not retain a drop of water, should be teased with food. It wants rest; and if food be given it is at once rejected, and the irritation of the stomach is thereby increased. In the gastro-intestinal form the food, if not vomited, passes so rapidly through the alimentary canal that its digestion is not accomplished, and the diarrhea is aggravated by it. Our practice in these cases is to forbid food of all sorts, even the mother's milk, and thus the question of improper food is disposed of. Twenty-four or forty-eight hours on ice or ice-water does not injure the sick infant any more than the sick adult, and by this regimen perfect rest is secured to the stomach. All the liquid foods devised in such cases appear to me simple hinderances to the recovery. In the intestinal form, where the tone of the stomach remains to some extent unimpaired, I forbid all articles of food that make their appearance in the evacuations, and all that the child dislikes. The former increase the diarrhea, and food forced on the

patient pretty certainly excites vomiting. The child is not hungry, but drinks slops and takes the breast to allay thirst. My rule is to give it ice and ice-water, regulating the quantity by the condition of the stomach.

As to medication, the several varieties of cholera infantum require manifestly a somewhat different treatment. In the gastric type exhaustion soon occurs, and cerebral symptoms are apt to set in early. The remedies which have proved most successful in my hands in this form are calomel and bromide of potassium, with tincture of hyoscyamus, as follows:

R. Calomel, gr. x;
 Pepsin, }
 Subnit. bismuth, . . . } āā gr. iij;

M. Divide into ten parts, of which give one every hour.

R. Bromide potassium, . . ʒ ss;
 Tincture hyoscyamus, . ʒ ij;
 Water, ʒ j.

M. S. A tea-spoonful every three or four hours.

The bromide of potassium acts as a brain sedative, the hyoscyamus exerts a general soothing power, while the calomel, by its peculiar purgative action, relieves gastric congestion. It is in this variety of the disease that we especially want the purgative operation of calomel, and we rarely fail to obtain relief from it. When its action has been obtained the mercury is discontinued; but the soothing mixture is kept up two days longer, the dose being varied according to its effect. Instead of mustard I apply cloths wrung out of ice-water to the epigastrium, to allay vomiting. My impression is that I have derived better effects from calomel since I began to combine it with pepsin. Experiments seem to show that this substance is necessary to the digestion of calomel; and I am disposed to think that where the mercurial fails to act the effect is to be attributed to the want of pepsin in the stomach.

In cholera infantum of the intestinal form I prescribe the following:

R. Acetate of lead, . . . gr. iv;
 Glycerine, ʒ j;
 Mint water, ʒ ss;
 Tinct. opium, gtt. iij;
 Distilled water, ʒ iij.

M. S. A tea-spoonful every two hours until the operations are less frequent.

This alone frequently relieves the patient; but where the case is of any standing calomel is generally required, and then I direct the following:

R. Calomel, gr. iv;
 Bicarb. potash, gr. iv;
 White sugar, gr. ij.

M. Divide into four parts, and give one morning and evening.

We do not here want the purgative action of calomel, as in the former case, but its effect upon the secretions; and I give it until the evacuations become consistent and of a dark-green color. If given oftener than twice a day it increases the purging; but by combining it with lead we obtain a slow action from it, with gradual thickening of the discharges and change in their color.

In the gastro-intestinal form of summer-complaint, where vomiting and purging set in violently at once, the treatment is essentially the same. Lead is given to restrain the evacuations, and calomel is prescribed with pepsin, as in my first formula. I reduce the dose, however, to half a grain, and alternate the lead and calomel, giving them every two hours apart, or every hour, or even every half hour, according to the urgency of the symptoms. The advantage of thus alternating them is that the calomel is retained by the astringent longer in the system.

This constitutes the basis of my treatment of this interesting affection. Many minutiae will occur to the experienced

physician as important, but I shall not go into these details now. I have meant in this short article to insist especially upon the fact that the action of a remedy depends as much on the manner in which it is used as upon the character of the remedy itself; and if I shall enable any one by my experience to obtain a better insight into the manner of administering calomel in the summer-complaint of children, my purpose will have been accomplished.

LOUISVILLE.

Reviews.

The Pharmacopœia of the Hospital for Diseases of the Throat. Edited by MORELL MACKENZIE, M. D., London, Honorary Medical Superintendent. London: John Churchill & Sons. 1872.

The hospital for diseases of the throat in Golden Square, London, having now been in operation for about ten years, the medical men who have labored in it think the time has arrived when the experience gathered there as regards drugs, and the combination of drugs, should be given to the profession. The new territory which they have so faithfully and laboriously cultivated "they propose to hand over to the commonwealth, to prove that it is now well worthy of annexation." Dr. Mackenzie, who is better known in this country as a worker in the new domain than any of his associates in the hospital, is the editor of the beautifully-printed little volume before us, and is responsible for both the new formulæ which it contains and the remarks which accompany them. It is but just to Dr. M. to say that his writings on throat affections have had perhaps more to do with awakening an interest in the subject on this side the water than those of any other author. He is esteemed here the highest authority on all that relates to the throat; and the pharmacopœia which he now sends out as a reflex of the practice of the hospital in relation to drugs possesses therefore a special value, which is enhanced, particularly to the busy practitioner, by the numerous formulæ it contains for lozenges, inhalations, atomized fluids, and throat collyria. The work should be in the hands of every physician who undertakes to treat diseases of the throat.

The Correct Principles of Treatment for Angular Curvature of the Spine. By BENJAMIN LEE, A. M., M. D. Philadelphia: J. B. Lippincott & Co. 1872.

The present work of Dr. Lee is made up of one of the papers contained in his excellent volume on "Angular Curvature of the Spine," now out of print, supplemented by an essay on modified suspension. The principal points of Dr. Lee's earlier work were, "first, that an *early recognition* of ulcerative disease of the spinal column will in a great number of cases enable us to arrest it *before deformity has been produced*; secondly, that *mechanical treatment* is of vastly greater importance than medication; and thirdly, that *the form of mechanical treatment* which gives by far the most uniformly satisfactory results is that of *constant antero-posterior support* by portable instruments, assisted by *occasional modified suspension* by means of fixed apparatus." In the volume before us our author declares that a widening field of observation and experience enables him to repeat the same conclusions with yet greater emphasis, and warrants him in urging them upon the profession with increased confidence.

Soon after the publication of Dr. Lee's first work we had occasion to treat a case of spinal disease according to the author's method; and we can now say, after increased observation and experience, that it has more than realized our expectations. The principle of straightening out the spine, and of affording it adequate antero-posterior support by an ingeniously-devised mechanical apparatus, will yield in suitable cases the most gratifying results.

Our author invites especial attention to the fact that pain and tenderness in the back, which the standard surgical authorities describe as early symptoms, are almost never present; the first manifestation of the existence of the disease being pain on the anterior aspect of the trunk. The externals of the book are unexceptionable.

Clinic of the Month.

ANTISEPTIC TREATMENT OF SMALL-POX.—Dr. A. E. Sansom, of London, communicates to the Practitioner an article on this subject, in which he takes strong ground in favor of this much-disputed question. He lays down the practical duties of one who would fairly put in force the antiseptic treatment of a case of small-pox as follows:

"I. EXTERNAL DISINFECTION. It is to be recollected that at the time when any morbid symptoms become manifest the poison of the disease can be exhaled from the system and can infect other persons. It is therefore a first duty that all superfluous materials, especially woollen, which can arrest and retain the poison shall be removed from the sick-chamber. It is the air into which the poison is exhaled that is now the chief medium of transmission; therefore our most obvious duty is to disinfect the air. It has been declared that all methods of air-disinfection are necessarily futile; that it can not be charged sufficiently with any antiseptic agent to exert any appreciable effect on the germs of disease. Seeing, however, that common air supplied in moderate quantity with certain antiseptic agents will kill animalculæ, and will arrest the manifestation of fungi, and looking to the evidence attesting the good practical effect of such attempted disinfection in various epidemics, I must believe that the minute zymogens are capable of destruction even while floating in the air. The most valuable agents to employ for disinfecting the air of the sick-chamber are sulphurous acid and carbolic acid.

"*Sulphurous acid* is easily generated by burning sulphur upon an iron plate, which for the purposes of safety should

be placed in the middle of a vessel containing water. The only objection is the pungency of the evolved gas; but Dr. Hjaltelin, who especially recommends this method, says that his small-pox patients soon became accustomed to it, and even experienced the good effects of it upon themselves.

"Carbolic acid. For my own part I prefer this, because I believe it to be, of all agents we are acquainted with, the most powerful as a disinfectant of the air. My experiments showed that the germs which under ordinary circumstances develop into fungi are entirely killed by a small proportion of carbolic acid present in the air supplied to the soil; and of all the volatile agents I employed this was the most efficient and most permanent. I always advise first that the floor of the sick-chamber be washed with water in which carbolic acid has been dissolved, and that some absorbent material moistened with the liquid acid, whence it may readily evaporate, be continuously exposed.

"II. INTERNAL DISINFECTION. The object of this is to disinfect the living body of the sufferer, to treat the disease by acting upon its cause, and to prevent the evolution from the body of active zymogens capable of infecting other persons. For this purpose the agents employed should possess two kinds of qualities; they should be capable of antiseptic action directly upon the zymogens which are contiguous to the mucous surface, and they should be readily absorbed and diffused throughout the system without losing their antiseptic properties. The necessity of attaining the former of these objects is shown not only by the fact that even before the disease is manifest infecting molecules are eliminated, but by our knowledge that the multiplication of the poison takes place at many points of the mucous surfaces as it does within the skin. Disinfection of the air-passages is attained by the means just described. Dr. Hjaltelin employed in addition sulphurous acid internally, diluted in the proportion of a drachm of the ordinary acid with an ounce of pure water, and administered

every third hour. Dr. A.W. Foot, in addition to the diluted acid used as a drink, employed gargles of the same agent, sprayed the undiluted acid over nares and pharynx, or used atomized solutions of tannin, carbolic acid, and sulphurous acid for the same purpose; caused the body to be washed with a solution of the acid, and sprinkled it about the bed and bed-clothes. The use of many of these plans is attended with comfort to the patient as well as advantage to the attendants; but as a general rule I am content with allowing the patient to breathe an atmosphere rendered antiseptic without employing any of the other means. The most important point that we should endeavor to attain is to antisept the tissues of the living body. Is this *prima facie* impossible? No; for we have positive evidence that we can administer to a living animal an antiseptic substance which shall permeate all its tissues and entirely prevent post-mortem decomposition. The structures of an animal so influenced will dry up, but will undergo no putrefaction whatever. It is undeniable, however, that great difficulties stand in the way; the chief, that when we are first called to see a case of small-pox a great portion of the mischief is already wrought; the zymogens have done their silent work. In some cases the petechiæ and ecchymoses show that such a destruction is already accomplished, that all means are hopeless. I have had evidence, however, that a petechiæ case, if it comes under care during the initiatory fever, is not necessarily fatal. One case, petechiæ and confluent, which presented the most alarming symptoms, completely recovered in my hands, under the antiseptic plan of treatment, in twenty-one days. The agents which have been recommended for internal administration are:

"1. *Sulphurous acid*. This, as has been before observed, is a most efficient direct antiseptic, and it has been employed with apparently much advantage by many observers, especially Dr. Hjaltelin; but I think there are great doubts as to its efficacy as an antiseptic upon the tissues. I know of no evidence

whatever in favor of the view that it can circulate as a free acid in the blood, while there are abundant probabilities that when absorbed into the blood it is neutralized by the alkaline constituents. In such case it would only reach the tissues in the form of an alkaline sulphite, and that in very small proportion.

"2. *Carbolic acid*. The evidence is very conflicting as to the efficacy of this agent, internally administered, in small-pox, or indeed any other zymotic disease. It is to be recollected that it is administered with difficulty on account of its nauseousness, and it has a powerful toxic action. To exercise after its absorption any real antiseptic effect it must be given in large quantities. In my own opinion, a dose that would be efficient as an antiseptic would be extremely dangerous. Moreover, the character of the symptoms which it induces, especially the cerebral plethora, renders great caution necessary with reference to its administration in small-pox; and it tends not to abide in the system, but be rapidly excreted. According to my view, those who employ carbolic acid as an internal remedy in the usual doses do not really put in force the antiseptic treatment.

"3. *The alkaline sulphites* have these characteristics: they are readily absorbed; they circulate unchanged in the blood; they permeate the tissues, so that they can be recognized in and recovered from them as sulphites, a portion only being excreted oxidized as sulphates; they tend to accumulate in the tissues, but yet exert no deleterious action; and they are powerful antiseptics. I believe them to be very valuable agents for internal administration in small-pox. I employ sulphite of sodium in twenty to thirty-grain doses, dissolved in water, repeated every third or fourth hour.

"4. *The alkaline sulpho-carbolates*. According to my views the action of these salts is as follows: they are readily absorbed, and, like the sulphites, easily permeate the tissues; they are not direct antiseptics like the sulphites, but becoming

decomposed they liberate free carbolic acid, which exercises its antiseptic action. The antiseptic effect is evidenced upon the tissues and upon the urine, which resist putrefaction. I am accustomed in small-pox to administer twenty to thirty grains of the sulpho-carbolate of sodium every third or fourth hour. I can only say that I have seen recovery take place in cases which appeared absolutely hopeless. As to the comparative value of the sulphites and the sulpho-carbolates I think there is room for doubt. I have feared, in cases which have manifested cerebral symptoms, to administer the latter, in case the liberated carbolic acid might aggravate any tendency to encephalic hyperæmia. In such cases I have preferred the sulphites. I have never seen, however, graver symptoms than transient vertigo and headache follow the administration of the sulpho-carbolates in any case.

"III. TREATMENT OF THE PUSTULES. This is a most important branch of the antiseptic plan. The application of an efficient antiseptic to the pustules on the surface of the skin fulfills two important indications; it tends to disinfect the laboratories of the poison, and thus to prevent the diffusion of the disease, and to arrest the process of suppuration to which are due the serious phenomena of the secondary fever. I have never seen secondary fever in any case in which the pustules have been treated in the manner I shall presently describe. What is called the ectrotic plan of treatment, which had for its object to make the pustules abort by local applications, has long been put in force, especially in France. For these purposes many materials have been employed; mercurial plasters, especially the 'emplâtre de Virgo,' solutions of corrosive sublimate, tincture of iodine, nitrate of silver, etc. In many cases it was stated that this method of treatment was followed with much success. These substances all have antiseptic qualities. No agent is more efficient in arresting fermentation than corrosive sublimate, and, according to Prof. Liebig, a trace only of oxide of mercury suffices to accom-

plish this arrest. The occurrence of ptyalism, however, taught caution in the use of mercurial preparations. Subsequently collodion and other agents, which operated merely by excluding air, were employed; but extended experience showed that oftentimes more harm than good arose on account of the pent-up discharges. M. Lemaire more recently used liquefied carbolic acid as an application to the pustules; and he found that they became completely desiccated and shrunken, while others on the same patient left untouched went through their ordinary course, and were voluminous and filled with pus. I have been able completely to corroborate M. Lemaire's observation. I apply the acid, liquefied by means of alcohol, by a camel's-hair brush to the surface of the vesicles as soon as the contents commence to appear puriform, taking care not to touch the sound skin. The application is attended by no pain. I have allowed the attendants also to brush over the pustules carbolized oil (proportion one to four, scented with oil of wild thyme), cautioning them to avoid as far as possible the unaffected skin, so as to prevent the toxic effects of the acid absorbed from the cutaneous surface. The application is attended with an anæsthetic, and certainly not an irritant, effect. After one or two repetitions the surface may be washed with water containing some of the alkaline permanganate solution (Condy's fluid), and during convalescence the ablutions should be made with coal-tar soap. Mr. J. R. Stevens, of Plymouth, who has employed this plan of treatment with much success, uses also a wash containing chloralum to the pustules. The astringent as well as antiseptic qualities of this substance probably contribute to its usefulness in this direction. Mr. Stevens also counsels at the conclusion of treatment a bath containing a pint of chloralum to render disinfection more certain.

"In conclusion, I venture to hope that my professional brethren will fairly test the antiseptic treatment of this dreadful malady; and I trust that they will prove it to be, in the

words of Dr. Foot, 'the plan best adapted to save life, to prevent deformity, and to check the propagation of the disease.'"

UTERINE EXPRESSION IN LABOR.—Dr. Suchard, in a very interesting monograph,* strongly urges pressure with the hands upon the uterus in labor when there is defective action of the abdominal muscles or of the uterus. The method of operating known as that of Kristeller, whose first writings upon the subject appeared in 1867, is—the patient lying upon her back near the edge of the couch—to apply the hands to the fundus and superior portion of the sides of the uterus, the thumbs opposite the anterior wall. The pressure is from above downward on the sides toward the axis of the uterus, and an endeavor is made to pass the hands as far behind the uterus as possible, while the fingers are approximated over the fundus, the palms pressing upon the sides. These compressions are continued five to eight minutes, and they may be repeated ten, twenty, or forty times, the intervals being half a minute, a minute, or even three minutes, according to the urgency of the case, the stage of labor, or the sensibility of the patient.

In this succession of intermittent pressure it is necessary to act sometimes upon the fundus, sometimes upon the lateral and superior part of the uterus, remembering that while the os is slightly opened, and not dilating readily, pressure should be chiefly upon the sides of the uterus. On the contrary, when the os is well dilated the best effect is produced by making pressure upon the fundus chiefly. In difficult cases a long interval should occur, ten to fifteen minutes, after a series of ten or fifteen intermittent compressions. Near the end of the accouchement the pressure should be upon the fundus. It may be laid down as a general rule that if, after twenty to thirty compressions, well made, no favorable results are manifest, they ought not to be continued.

**De l'Expression Utérine Appliquée au Fœtus*, Paris, 1872.

Dr. Suchard gives an interesting sketch of the management, among the uncivilized in different parts of the world, of tedious labor, not the most gentle of the methods mentioned being that which the New Guineians follow—blows and kicks upon the abdomen given by the friends and parents of the unfortunate woman; or that of a certain tribe in Africa, who have constant pressure upon the abdomen effected by the head of one of the female attendants; and then thus declares the result of his researches, that the least civilized people, and thus most perfectly under the dominion of nature, have seized by intuition this great fact, this grand law, that in the natural order of things the product of animal fecundation, as of vegetable, is never removed from its receptacle but by a *vis a tergo*, and that in tedious cases of human labor they best aid the insufficient forces of nature by external pressure.

The author calls attention to the value of *expression* in all cases where the action of the abdominal muscles is deficient or absent. Especially where chloroform is given it neutralizes the effect of this medicine in suspending voluntary effort; it restores the uterus to the pelvic axis; it adds its force to the expulsive force of the uterus. The influence of compression upon the uterus itself is to excite its vigorous contraction.

Among the relative advantages claimed for this plan of treatment are, that there is no departure from the normal flexion of the fetus, as there will be in extraction by the forceps or by the hand; no necessity for previous rupture of the membranes; no rotation other than would be made by the unaided natural forces; no hemorrhage, and greater facility in the delivery of the placenta.

The contraindications to Kristeller's method are abnormal presentation, the impossibility of acting upon the uterus in consequence of excessive rigidity of the abdomen, inflammation of the skin, of the muscles, or of the peritoneum; inflammation of the uterus or of its appendages; and finally deformity of the pelvis.

TREATMENT OF UTERINE HEMORRHAGE BY QUININE.—Dr. Bartharez * strongly urges the administration of the sulphate of quinia in the treatment of menorrhagia and of metrorrhagia. Gueneau de Mussy, who directed the treatment of some of the cases recorded by the writer, appears to have usually prescribed a gramme and a half of the sulphate, divided into three doses, one dose being given every second hour.

The author explains the beneficial effect of the quinine by its sedative action upon the heart, and also by its influence upon the capillary circulation, diminishing it by acting upon the unstriped muscular coats of the capillaries, producing prolonged contraction, thus lessening the quantity of blood that traverses them in a given time. He asserts too that this agent also acts in producing directly contraction of the fibers of the uterus when gravid and when non-gravid.

In discussing the action of quinine upon the pregnant uterus, he quotes the statement made some years ago by one of our old friends and subscribers, Dr. John Lewis, formerly of Knightstown, Ind. We think the following extract from this recent monograph may be of interest to some of our readers:

"A la suite d'une discussion qui eut lieu dans une séance de la Société Médicale de Kighstown, sur le sulfate de quinine, le Dr. Cochran a rapporté un cas d'inertie complète de l'uterus dans lequel il administra en une seule dose 10 grains de ce sel. Des douleurs survinrent bientôt et l'accouchement se fit normalement. Le Dr. Canada croit aussi à cette action de la quinine, mais a la condition qu'elle soit donnée à forte dose."

SKIM-MILK TREATMENT OF DIABETES.—Soon after Dr. Donkin's contributions to the treatment of diabetes first appeared in the London Lancet they were noticed in this journal. The author has since embodied them in a volume, and, as we learn from the Dublin Journal of Medical Science, has in addition entered somewhat fully into the question of the pathology of

* *Du Traitement des Hémorrhagies de Matrice par le Sulfate de Quinin.* Paris, 1872.

diabetes, and given a tolerably full account of this disease. In the absence of the work we abstract the following from our able contemporary:

"The mode of treatment which Dr. D. recommends consists in the administration of six or seven pints of skim-milk daily. This quantity is to be divided into four meals, with an interval of four hours between each. It is essential to this plan that no other article of food whatever should be taken by the patient.

"Dr. Donkin's views regarding the relation of the oleaginous or fatty principles of food to diabetes are novel, and are urged with some force. He holds, contrary to the received doctrine on the subject, that fats and oils are capable of being transformed into diabetic sugar, and as a consequence would exclude articles of this kind from the dietary of a diabetic patient. It is from this cause that he regards it as necessary that the greater part of the cream should be removed from the milk which forms the staple of his treatment. In one case of diabetes treated on Dr. Donkin's plan he found that allowing the milk to stand twenty-four instead of twelve hours before being skimmed, so as to insure a more complete separation of the cream, was followed by a marked decrease in the specific gravity of the urine, and by a diminution in the sugar to one half of its previous quantity. In another case the administration of new milk, rich in cream, caused a return of sugar in the urine about a fortnight after its disappearance under the skim-milk treatment. Dr. Donkin's opinions on this subject are opposed to those of Dr. Pavy, and are directly contrary to the observations of Dr. Richardson,* who states that fat ought to be given in large quantities; cod-liver oil when it agrees, but if it be unsuitable, as much cream or fresh butter as can be digested. Cod-liver oil has been found to be very beneficial in a case observed by a no less accomplished chemist than Dr. Bence Jones.

* See *American Practitioner*, July, 1872.

“As regards the nature of diabetes, Dr. Donkin suggests that it may depend on perverted functional activity of the liver cells, whereby they morbidly secrete diabetic sugar instead of glycogen, their normal secretion.

“An advantage of some importance claimed for the skim-milk treatment is that it relieves thirst and is pleasant to the patient, especially when first administered. It is, besides, a cheap mode of treatment. The effect of the treatment, according to the author, is remarkable for the rapidly beneficial results obtained, twenty-four hours being generally sufficient for the production of a marked improvement, and seldom more than from two to six days being required to procure complete relief from suffering. In cases of not long standing the sugar will be completely removed from the urine in a period varying from twelve days to five or six weeks. In cases of long standing a temporary arrest of the disease will be brought about.

“The author has adopted the same mode of treatment with great success in Bright's disease. The cases most amenable to the proposed treatment he has found to be those in which the renal disease had begun in the inflammatory form, and afterward passed into the chronic condition. The rules for the administration of the milk are the same as in diabetes.”

TREATMENT OF WOUNDS AFTER OPERATION.—In a sketch of the major operations performed by Mr. Spence last year in the Royal Infirmary of Edinburgh Dr. Lediard makes the following remarks: “Carbolized catgut ligatures were used in all cases, and as a rule they were not seen again after the closing up of the flaps. To arteries in their continuity Mr. Spence uses silk. Dry cold was applied immediately after operation to all cases, unless there was some special reason to the contrary, the method of application being as follows: the ice is pounded into small pieces and put into bags made of gutta-percha, chloroform sealing up the margin and rendering

the bag water-tight. The bags are not to be put over the incision, but on either side. The dry cold was not kept on for more than forty-eight hours; in many cases not so long. The majority of cases were dressed, from first to last, with a piece of oil-skin dipped in dextrine over the line of incision, and the entire wound covered with gutta-percha; the benefit of such treatment being that the discharge is not confined, and it is possible to see what is going on without removing the dressing. After the ice is given up the gutta-percha is narrowed to the line of incision, so as not to retain cutaneous transpiration and create moisture, which tends to disorganize the connecting plasma. In all cases stitches were removed as soon as possible, and replaced by ordinary strapping. In three cases of amputation there was reactionary hemorrhage to small amount, requiring, however, the flaps to be taken down. In the majority of cases small abscesses formed during the healing. These seemed to be of service, allowing the incision to unite, and acting as a drain at a dependent part. The lotions employed were chlorinated soda, sulphate of zinc, chloride of zinc, carbolic acid, Condy, and in some cases simple water." (Medical Times and Gazette.)

CEREBRO-SPINAL MENINGITIS. — Dr. J. C. Reeve, a most accomplished physician of Dayton, Ohio, has contributed an unusually interesting paper to *The Clinic* on an epidemic of cerebro-spinal meningitis which recently occurred in that place.

Dr. R. saw in his own practice twenty-nine cases, which he thus classifies: seventeen adults, of whom eleven were young; eight children; four infants. Of the adults six died and eleven recovered; of the children five died and three recovered. The four infants died. Total deaths fifteen, being a mortality of over fifty per cent. One of the adults who died was over sixty years old. In another the disease was not recognized until after death. One child died in a convulsion

before the physician saw it. Another, who was taken in the morning and died before sunset, did not swallow after being seized; and another perished in thirty-six hours. Besides these cases Dr. R. saw, in consultation, two young adults, both of whom recovered, and four children, two of whom recovered and two died.

"In regard to the symptoms generally, it may be said that in a majority of the cases they bore a striking resemblance to those of malarial fever; and in several cases, after the existence of the epidemic was recognized, a diagnosis could only be made by watching their progress. This, of course, applies to the milder cases. In those better marked certain characteristic symptoms were prominent, and deserve special mention.

"Headache was an early, an invariable symptom, often severe, and more frequently occipital than frontal. Pains in the back, neck, and limbs were almost universally present. The patients complained of just such pains in the bones as in malarious fever, but more severe. Retraction of the neck was marked in most of the cases; but this was not so early a symptom as others, not appearing until after two or three days. I satisfied myself that this retraction is voluntary, or reflex. If the hand be passed under the neck as the patient lies on the pillow there is no rigidity of the muscles. Attempt to bend the head forward, and they immediately become rigid, and the patient complains of great suffering. Vomiting was generally early and severe. It was a well-marked symptom, and in several cases was the key to a differential diagnosis between the disease and malarial fever. Its duration was not beyond the first few days, generally speaking. Irregularity of the pulse was a well-marked symptom, and I learned to look upon it as the most distinctive symptom of the disease. Present in almost every case, extremely marked in many, my experience would lead me to lay much greater stress upon it than is done by Stillé.

"These were the prominent symptoms of the disease. Some

others deserve a moment's consideration. Fever was never high as either shown by pulse or temperature. The nervous centers were variously affected; coma, convulsions, delirium, or perfect possession of the faculties. Vision was disordered in but two cases. One, a very intelligent lady, had illusions; saw grotesque figures, etc. In this case there was want of sensibility of the bladder. It was only upon the attention of the patient being called to the subject that she remembered she had not been up for some fourteen hours. She then passed a large quantity of water, so large that under ordinary circumstances it would have caused severe pain. For several days she only arose by *time*, her sensations giving her no warning of the state of the bladder. Hiccough occurred in three cases, and is said to have been a well-marked symptom in another case also attacked on the same day. In one of the cases it was rather a severe spasm of the diaphragm than hiccough; seizing the patient violently, and cutting short his speech with severe pain. I have seen nothing like this at any time or in any disease.

"I saw an eruption but once. In one of the cases of children seen in consultation petechial spots were scattered over the abdomen. This case proved rapidly fatal. In one other case the boy's mother reported spots on the abdomen, but they were not present when I examined it.

"I may say, in general terms, that the disease was exceedingly irregular in its manifestations; and this, I believe, is usual. Prof. S. G. Armor, writing to me of the epidemic prevailing in Brooklyn, N. Y., says 'no two cases are alike.' There is also the widest variation in the duration of the disease. In contrast to the rapid course of some of my cases, I may state that one of my patients, a young adult female, died in the thirteenth week of her sickness. I have heard of several cases of this epidemic lasting many weeks. Last spring I had under my care a young adult female for eight weeks. During a large part of this time she passed her urine invol-

untarily. It was impossible to wake her. The pupils were widely dilated; for many days her pulse was barely perceptible. On several occasions her friends ceased giving her anything, on the plea that she could not swallow, and indeed it required perseverance and management to get her to do so, and she completely recovered, and is now well. From that case I learned a lesson which has been valuable to me in this epidemic. It is never to despair of any case of the disease, however severe it may be, or however hopeless it may appear. I regret, however, to be obliged to say that this assurance of possible recovery, even in cases the most desperate in appearance, is based more upon the *vis medicatrix naturæ* than upon the efficacy of therapeutical measures. So far as cutting short the disease is concerned, treatment was most eminently unsatisfactory. Of course my experience has been too limited to enable me to arrive at any general conclusions in regard to treatment, or to give any very positive conclusions as to the action of particular medicines; and I can only state the impressions left from the observation of the action of remedies used in the cases under my care.

"The articles used in the greatest number of cases, and during more time than any other, were the iodide and bromide of potash. They were generally given together, in mixture, in doses of five grains of the former and half a drachm of the latter. I can not say that I ever observed any effect from them, and my belief is that the disease was uninfluenced in its course by their administration. Probably sulphate of quinia was not given to the extent it deserves, considering the recommendation of the committee of the American Medical Association, and other testimony in its favor. Two cases were lost while under the influence of full doses of this medicine at an early period of the epidemic. This destroyed confidence in its efficacy; and although it was afterward given both as a tonic and an antiperiodic, no evidence of its beneficial effect was seen except in one (fatal) case, in which the symptoms,

more distinctly intermittent than usual, were modified by it. Permanganate of potash, which is esteemed so highly by some, was not used much. It was given for a short period in two or three well-marked cases; but no effect being observed, it was not persevered with sufficiently to pass judgment upon its merits. The application of ice in bladders to the back of the neck was used in a portion of the cases. If this remedy did not influence the course of the disease, it certainly promoted the comfort of the patient. It was used only during the first days of the illness. Blisters to the back of the neck were used pretty freely. I have a very decided impression that they did good, and that is also the belief of two or three very intelligent patients. Mercurials were not administered to any great extent. When given it was always with opium, and they were not in any case pushed to the extent of showing decided evidence of constitutional action. I did not become partial to the use of cathartics; certainly think I have seen injury result from their use, especially by losing time early in the disease.

"Having now touched upon all the remedies worthy of note except one, there is but a sorry show of therapeutical results. Happily this exception is a medicine which most certainly modified the disease and promoted the comfort of the patient, if it did not act directly curative; and upon this latter point my impressions are all in its favor. I allude to opium, and my experience in this respect accords with that of many other observers. Under its influence the pains of the head, neck, back, and limbs were allayed, and the vomiting generally controlled; and it was under the steady, uninterrupted use of opiates that some of the best-marked cases passed steadily along to recovery. It was given freely; internally in the form of Dover's powder; when vomiting did not contraindicate in powder; and as morphia when this symptom was present. The most prompt as well as best effect of the remedy was seen when it was administered hypoder-

mically; but when using it in this way its action was always modified by atropia. I used a mixture made of a solution of sulphate of morphia, two grains to the drachm, five parts; solution of atropia, one grain to the ounce, one part. One intelligent lady, in whom morphia before always produced most distressing nausea and vomiting—who took it, however, during this attack and bore it very well—gave very strong testimony as to its superiority when administered hypodermically, and would have it in no other way.

"But is opium curative of the disease? This is a question as difficult to answer as it is important. I once believed that it was. I arrived at this conclusion from observation of two cases during the epidemic of last year, and toward its close. Both were well-marked cases in adult females—cases as to the character of which I had not a doubt—and both yielded rapidly to hypodermic injections of morphia; but since I have learned that authors recognize an *abortive form* of the disease I am in doubt. The following case is of interest as bearing upon this question. It was the last seen of this year's epidemic, and occurred at quite an interval from any other.

"A young man of fair health but sedentary habits got up and went to market, and then opened his grocery in the front part of his dwelling. Upon being called in to breakfast he sent word that he did not want any, because he was not well. An hour or so after that he wandered back into the house, and was found to be entirely unconscious of what he was doing, it was impossible to make him comprehend anything, and he was in a violent chill. Some time elapsed before I reached him, and he was seen by another physician. When I arrived I found him in an alarming condition. He was cold, lips purple, pulse a mere thread, respiration sighing, pupils dilated and sluggish; he could not be made to answer any questions or utter an intelligible word; he struggled and fought against taking anything into his mouth, and if it was introduced he spat it out. He was ordered to bed, external

warmth to be applied to him in various ways, a warm injection to be administered, and the attempt to give stimulants to be persevered in. Some hours were occupied with these measures; not a drop of anything had been swallowed, and it seemed as if he were going to die before reaction came on. Feeling more certain of the diagnosis as I observed the case, and nothing else being possible, I injected five minims of the solution into his arm. In an hour he was certainly no worse, and I threw in ten minims more. This was rapidly followed by returning warmth and improvement in every respect, so that he soon responded to queries, saying that his head hurt him. Vomiting in this case lasted forty-eight hours; but he was convalescent within a week, and had only as remedies ice to back of neck, a few doses of the bromide and iodide of potash, besides hypodermic injections.

"We observed but one other case of this type, with those symptoms of profound adynamia which have given to the disease in some epidemics the name of 'sinking typhus.' That was a girl, ten years old, who rallied from the period of depression under table-spoonful doses of brandy repeated every thirty minutes, but died at the end of about a week. I regret that the hypodermic injection was not used in her case, as it afforded a fine opportunity of obtaining evidence upon this most interesting question as to the curative power of opium.

"Looking carefully over what I have gathered of the effect of remedies, this is how I would treat the disease if called upon again: put the patient promptly under the influence of morphia, administered hypodermically, and keep him under it. I certainly can not assent to the doctrine that opium only does good because administered toward the end of the disease. Apply for the first day or two ice to the back of the neck; afterward, blisters; waste no time in giving cathartics and waiting for them to act. I would use other remedies, of course, according to varying indications, but believe this to be the line to fight it out on."

Notes and Queries.

PROFESSOR LINTON.—The death of Prof. Moses L. Linton is announced in the July number of the St. Louis Medical and Surgical Journal, of which he was the originator and for many years the chief editor. The event, which occurred on the 2d of June, was not unlooked for by his immediate friends, who for many months had marked his failing health, but to those at a distance it comes with painful suddenness; for, although Dr. Linton was no longer a young man, he had not begun to show any evidences of age, but was still in the full possession of his faculties of mind, and capable of great usefulness in his profession.

The deceased was a native of Kentucky, and a graduate of Transylvania University. The writer has the most pleasant recollection of his first appearance in Lexington, in 1833, as a student of medicine. Dr. Cooke spoke of him to me before I met him in terms which caused me to feel an unusual interest in him. "He is a young man," said Prof. Cooke, "of a sturdy, independent mind, who will make his mark in the world." The prediction was fulfilled in the life-time of his old master, and before he had relinquished medical teaching. Dr. Linton was graduated in the spring of 1835; and after practicing medicine a few years in partnership with his friend and preceptor, Dr. John H. Polin, at Springfield, visited the hospitals and medical schools in Paris, London, and Dublin. While abroad he was a correspondent of the *Western Journal of Medicine*, the junior editor of which introduced him to its readers as "one of the most gifted young physicians in Ken-

tucky, with industry, a noble ambition, a true love of science, and describing accurately and elegantly whatever he sees." On his return he settled in St. Louis, where his talents and medical learning secured him in a little while a chair in the St. Louis Medical College; and in 1843 he projected the St. Louis Medical and Surgical Journal, the first enterprise of the sort west of the Mississippi River. For several years he was its sole editor; and until his declining health compelled him to quit it he labored faithfully upon it, rendering it one of the ablest of our medical journals. In his valedictory, penned only a few months before he died, he wrote: "The young and vigorous take the places of the old and superannuated, who, though they may 'cast a longing, lingering look behind,' are yet capable of something like youthful pleasure in the continued success of enterprises undertaken by them in the hopeful morning or courageous noontide of life." In the earlier numbers of his journal he published a series of papers, which he subsequently issued in a volume, entitled "Outlines of Pathology," and dedicated to his old friend, Dr. Polin.

Dr. Linton was a man of high intellectual endowments, and of the purest and noblest impulses; sincere, earnest, truthful, honest. He was a vigorous writer, with taste, judgment, and a fancy that enlivened the driest subjects. As a teacher he won confidence by his learning, his modesty, and his conscientiousness, which made him shrink from any approach to exaggeration as from falsehood. Like his old preceptor, Cooke, whom he probably took as his model, he made his statements so clearly and calmly, and argued every question with an air of such perfect candor and fairness, that his pupils found it nearly impossible to dissent from his opinions. In his death the medical profession of our country has sustained the loss of a member whose life shed luster upon it, and his friends deplore him as one whose place in their affections will not soon be filled.

L. P. Y.

OHIO STATE MEDICAL SOCIETY.—The twenty-seventh annual meeting of this very flourishing society was held in Portsmouth on the 11th, 12th, and 13th of June. The attendance was unusually large, the number of reports offered was greater than the society had time to hear read, and the discussions both spirited and in excellent temper. "Not a jar, not a discordant sound, not an unpleasant thing occurred during the meeting." The address of the president, Professor W. W. Dawson, the worthy successor of the lamented Blackman, was an interesting comparison of the American profession of to-day with that of twenty-five years ago. The learned speaker adopts the "new departure" in its broadest and fullest extent, and makes a plea for American medicine, American physicians, American schools, and American authors, which, coming as it does from an accomplished and popular teacher in a leading medical institution, can not fail to carry with it very great weight. Dr. Dawson characterizes the state and national addresses on medicine "as being generally so much alike that the antiquarian, on turning them over, will think them written by the same hand, dictated by the same brain;" and then proceeds to declare that "the American physician of to-day stands abreast with the most distinguished; that the medical students found yearly in our colleges are of the class from which have come the physicians who have given distinction to all departments of medicine; that the defects of medical education are gradually but steadily being remedied; that the doctorate yearly advances in worth, honor, and dignity in as steady and faithful a way as is desirable; that our system of medical teaching is, with all its defects, equal, all things considered, to any other department of science or letters in our new and developing country; that if our system of medical education be so defective, why such great excellence in the men who have been educated by it? It is unusual to see such fruit from a tree which is all unsound." And finally he says, "the lesson of the whole matter is that the profession

in this country is not in as bad condition as would be inferred from these annual howlers."

It has always rather amused us to see how these "annual howlers," as our distinguished friend calls them, magnify what the profession *was* and deplore what it *is*; to watch their eyes sadden as they painted the noble student of the past, and see them flash with a splendid indignation as they whacked the ignorant beginner of to-day; to listen to their mournful eloquence as they depicted the dignity, the influence, the power, and the glory of the doctorate in the by-gone days, and tore passion to tatters as they denounced the schools and the scholars of the present. But more noticeable than all this is the fact that medical schools multiply in the land, and few teachers resign.

CÆSAREAN SECTION AT THE EIGHTH MONTH IN A WOMAN IN ARTICULO MORTIS FROM PULMONARY TUBERCULOSIS—CHILD BREATHEs, BUT DIES.—Dr. H. A. West, one of the resident graduates of the Louisville City Hospital, recently performed hysterotomy on a young negress, in the hope of saving the child, the mother being at the time moribund. The following notes of the case have been kindly furnished us by the operator.

Ellen Jewell, a negro woman aged twenty, a house-servant, single, the mother of one child, was admitted into the hospital June 28th. Patient stated she was eight months advanced in pregnancy. Up to February last her health had been good. About this time a troublesome cough set in, and she lost flesh and strength very rapidly. She spoke with difficulty, and was too feeble to give any further account of herself. Skin bathed in perspiration; pulse 140, extremely weak; temperature 103°; respiration 80, and labored; tongue tremulous, with red edges; anorexia; bowels regular; urinated without difficulty; unable to rest without opium; subsultus tendinum. Her mother states that she has had several uterine hemor-

rhages, induced by attempts to bring on abortion. Complains of abdominal pains; says she has not felt fetal movements for three days. Auscultation revealed sounds of fetal heart very distinct in left iliac region. The os uteri was sufficiently dilated to admit the finger; membranes intact. On percussion, diminished resonance over the entire lung; decreased vocal resonance and fremitus over both sides; heart sounds distinct over both lungs; no râles perceptible.

As almost every case coming into hospital at this season of the year has malarial trouble of some form, the patient was ordered three grains of quinine hourly for eight hours, with half an ounce of brandy and one ounce of milk.

July 1st—The nervous phenomena were all intensified; patient constantly endeavoring to get out of bed; intellect duller; respiration more frequent and more superficial; sordes on teeth; sounds of fetal heart still distinct. Omitted quinine; continued brandy and milk. Believing the patient would die during the night, I determined to make an effort to save the child by performing the *cæsarean* operation.

About one o'clock in the morning convulsions, which, though short, were very frequent, set in. At two o'clock the patient was dead. While she was in articulo mortis, assisted by Dr. C. B. Doll, I made an incision in the median line extending from the umbilicus to the symphysis pubis, cutting down upon the uterus at one stroke. This organ, which presented a regular outline, was quickly opened by a few strokes of the knife—the fingers serving as a guide—the child immediately extracted, and the cord cut. The child breathed several times, but all efforts at restoration proved unavailing.

An autopsy of the woman, made July 2d, revealed both lungs infiltrated with miliary tubercle; heart and abdominal organs healthy; brain not examined. The uterus, with appendages, was extracted; its walls an inch thick; placenta attached at the fundus posteriorly.

VICARIOUS MENSTRUATION.—Dr. W. J. Arnold, of Jackson, Tenn., has just reported to us an interesting case of periodical hemorrhage of the bowels, which he regards as a case of vicarious menstruation. The subject is a very old negro woman, who bore several children in her prime, and began to be irregular in her catamenia about the usual time of life; but as her health suffered at the time she applied to a physician, who gave her an emmenagogue. A discharge of blood soon followed, but from the bowels instead of the uterus; and this has continued to appear with great regularity, once every lunar month, for nearly forty years. She suffers with pain in the crown of her head, pain in her back, nausea and vomiting, and is feverish and restless when the hemorrhage is suppressed. On its reëstablishment all these symptoms disappear.

SUPPOSED TUBERCULAR MENINGITIS—RECOVERY.—Dr. J. T. Wood, of Lisbon, Mo., reports the following case: "Patient, male, sixteen months old, had been ill a week upon my first visit, when I found him disposed to sleep, but easily aroused; pupils dilated, and responding slowly to light; general hyperæsthesia of the surface; tenderness of the upper third of the spine. Patient would occasionally give a sharp scream, and lose the occiput in the pillow; abdomen retracted; bowels costive; respiration 26; pulse 102; vomiting at intervals; tongue furred; some cough; slight dullness at the apex of the left lung; face pale, but occasionally flushing. Several of his mother's family had died from pulmonary tuberculosis. Gave the first day a combination of calomel, quinine, chlorate of potash, and bismuth, in small quantities, at intervals of six hours. The second day gave bromide with iodide of potassium, and also the combination previously mentioned, the calomel being omitted. This treatment was continued for about two weeks, an occasional dose of mercury and chalk being given to open the bowels, and then only the bromide and iodide given, and a daily bath of an acidulated infusion

of cinchona directed. Convalescence commenced two weeks and a half after the treatment was instituted, and then, in place of previous treatment, one grain of quinine was given three times a day. In two months more the patient had entirely recovered, though somewhat weak."

A GERMAN SURGEON ON ENGLISH SURGERY.—Our able contemporary, the London Lancet, publishes an address recently delivered by Dr. Stromeyer, of Hanover, at Saint Thomas's Hospital, London, in which the distinguished German pays his *confrères* in the British metropolis the following very handsome compliment: "There is no place in Germany which can boast of such a number of great surgeons at the same time. Our greatest capitals have but a few surgeons of eminence in comparison. Whatever may be their merit, their example is not so striking as that of a whole body acting out the same principles. In Paris the number of surgeons is greater than in our German universities of Berlin and Vienna, but not to be compared to London, which I consider is a central point of surgery for the whole globe."

THE LONDON LANCET AND DR. COWLING'S VALEDICTORY ADDRESS TO THE GRADUATING CLASS OF THE UNIVERSITY.*—Our valued contemporary speaks of this address of our friend, Dr. Cowling, as containing "some views on things medical which are deserving of notice;" and among other points quotes, with approval, the following: "What the American people want just now from the medical schools is doctors. If we manufacture anything else, to any great extent at least, it will be a drug on the market." The editor of the Lancet then adds: "This demand for doctors rather than philosophers extends, we believe, also to the 'old country;' and we wish some of our medical legislators would sometimes bear the fact more fully in mind."

* See American Practitioner, April, 1872.

UNIVERSITY OF LOUISIANA.—The failing health of Dr. Stone having obliged him to withdraw from the active duties of the profession, he has resigned the professorship of surgery in the medical department of the University of Louisiana. The name and fame of the veteran surgeon are, however, part of the wealth of the institution, and can not be separated from it. Prof. Stone is succeeded by his colleague, Dr. T. G. Richardson, who, it is known, has most acceptably filled the chair of anatomy in the University for more than a dozen years past. Dr. R. is justly regarded as one of the first anatomists and most accomplished surgeons of the country. Dr. Samuel R. Logan, formerly professor of surgery in the New Orleans School of Medicine, has been appointed to the chair made vacant by the transfer of Professor Richardson, and will take with him to his new position every element of the successful teacher. There are few better lecturers anywhere than Dr. Logan.

UNIVERSITY OF OXFORD AND PROFESSOR S. D. GROSS.—The entire profession in the United States will be gratified to learn that our distinguished countryman, Prof. Gross, has recently had conferred upon him by the University of Oxford the degree of LL. D.